

WHAT IS CLAIMED IS:

1           1.       A method for processing a message in a network computing system  
2       including a facsimile transmission comprised of a recipient contact address and  
3       message content, wherein the message content includes at least one of message text  
4       and attached files, comprising:  
5           managing multiple facsimile transmission as fax jobs in multiple fax  
6       management systems;  
7           transferring the message content from the multiple fax management systems to  
8       a rendering computer;  
9           launching, with the rendering computer, at least one application program to  
10      convert the message content from the multiple fax jobs to images in a file format;  
11      transferring, with the rendering computer, the converted message content in  
12      the file format to the fax management system that sent the message content to the  
13      rendering computer; and  
14      transferring, with the fax management systems, the message content in the file  
15      format to one of multiple communication ports for transmittal to the recipient contact  
16      address.

1           2.       The method of claim 1, further comprising:  
2           transferring, with the fax management servers, job numbers assigned to the  
3       fax jobs to the conversion computer; and  
4           requesting, with the rendering computer, the message content for the job  
5       numbers, wherein the fax management servers transfer the message content in  
6       response to receiving the request from the rendering computer.

1           3.       The method of claim 2, further comprising:  
2           maintaining, with the fax management servers, job tables including fax job  
3       records identified by job number; and

4 changing, with the fax management servers, state fields in the fax job records  
5 to manage the workflow of the fax jobs between the first computing system, second  
6 computing systems, and communication port.

1 4. The method of claim 2, wherein the message including the facsimile  
2 transmission further includes sender information for the sender of the fax job, wherein  
3 the rendering computer generates the content of each attachment and message text  
4 into images in the file format, further comprising:  
5 using the sender information to access fax cover page information for the fax  
6 jobs;  
7 generating a cover page image in the file format from the fax cover page  
8 information if there is fax cover page information for the sender of the fax job; and  
9 transmitting the converted fax cover page image to the fax management  
10 computer that sent the job number.

1 5. The method of claim 1, wherein the file format comprises an image  
2 file format, and wherein the message content is converted to one or more images in  
3 the file format.

1 6. The method of claim 1, wherein for each attachment file received from  
2 the fax management computers, the rendering computer further performs:  
3 determining one of multiple application programs capable of opening the  
4 attachment file; and  
5 using the determined application program to convert the content of the  
6 attachment file to one or more images in the file format, wherein all the images in the  
7 file format comprising the at least one converted attachment file are transferred to the  
8 first computing system.

1           7.       The method of claim 6, further comprising converting, with the  
2     rendering computer, the message text to at least one image in the file format, wherein  
3     the images comprising the converted attachment files are arranged in a file in the file  
4     format according to an order in which they were attached to the message and follow  
5     one image comprising the converted message text.

1           8.       The method of claim 6, further comprising maintaining, with the  
2     rendering computer, multiple application programs open to concurrently convert the  
3     content of different attachment files for fax jobs from multiple fax management  
4     computers to images in the file format.

1           9.       The method of claim 6, further comprising using, with the rendering  
2     computer, one application program to concurrently convert the content of different  
3     attachment files associated with the application program to images in the file format.

1           10.      A network computing system for processing a message in a network  
2     computing system including a facsimile transmission comprised of a recipient contact  
3     address and message content, wherein the message content includes at least one of  
4     message text and attached files in a network computing system, comprising:

5           (a) a plurality of fax management systems, each comprising a processor and a  
6     memory coupled to the processor;

7           (b) a rendering computer comprising a processor and a memory coupled to the  
8     processor;

9           (c) at least one communication port in communication with each fax  
10    management system;

11          (d) fax management program logic residing in the memory of each fax  
12    management system, wherein the fax management logic, when read and executed by  
13    the fax management processors, performs:

14 (i) managing multiple facsimile transmission as fax jobs in multiple  
15 fax management systems;

16 (ii) transferring the message content from the multiple fax  
17 management systems to the rendering computer; and

18 (iii) transferring the message content in the file format received from  
19 the rendering computer to one communication port for transmittal to the  
20 recipient contact address; and

21 (e) rendering program logic residing in the rendering memory, wherein the  
22 rendering program logic, when read and executed by the rendering computer  
23 processor, performs:

24 (i) launching at least one application program to convert the message  
25 content from the multiple fax jobs to images in a file format; and

26 (ii) transferring the converted message content in the file format to the  
27 fax management system that sent the message content to the rendering  
28 computer.

1 11. The network computing system of claim 10, wherein the fax  
2 management program logic further performs transferring job numbers assigned to the  
3 fax jobs to the conversion computer, and wherein the rendering program logic further  
4 performs requesting the message content for the job numbers, wherein the fax  
5 management servers transfer the message content in response to receiving the request  
6 from the rendering computer.

1 12. The network computing system of claim 11, wherein the fax  
2 management program logic further performs:  
3 maintaining job tables including fax job records identified by job number; and

4 changing state fields in the fax job records to manage the workflow of the fax  
5 jobs between the fax management system, the rendering computer, and  
6 communication port.

1 13. The network computing system of claim 11, wherein the message  
2 including the facsimile transmission further includes sender information for the  
3 sender of the fax job, wherein the rendering program logic generates the content of  
4 each attachment and message text into images in the file format, and wherein the  
5 rendering program logic further performs:  
6 using the sender information to access fax cover page information for the fax  
7 jobs;  
8 generating a cover page image in the file format from the fax cover page  
9 information if there is fax cover page information for the sender of the fax job; and  
10 transmitting the converted fax cover page image to the fax management  
11 computer that sent the job number.

1 14. The network computing system of claim 10, wherein the file format  
2 comprises an image file format, and wherein the message content is converted to one  
3 or more images in the file format.

1 15. The network computing system of claim 10, wherein for each  
2 attachment file received from the fax management computers, wherein the rendering  
3 program logic further performs:  
4 determining one of multiple application programs capable of opening the  
5 attachment file; and  
6 using the determined application program to convert the content of the  
7 attachment file to one or more images in the file format, wherein all the images in the

8 file format comprising the at least one converted attachment file are transferred to the  
9 first computing system.

1 16. The network computing system of claim 15, wherein the rendering  
2 program logic further performs converting the message text to at least one image in  
3 the file format, wherein the images comprising the converted attachment files are  
4 arranged in a file in the file format according to an order in which they were attached  
5 to the message and follow one image comprising the converted message text.

1 17. The network computing system of claim 15, wherein the rendering  
2 program logic further performs maintaining multiple application programs open to  
3 concurrently convert the content of different attachment files for fax jobs from  
4 multiple fax management computers to images in the file format.

1 18. The network computing system of claim 15, wherein the rendering  
2 program logic further performs using one application program to concurrently convert  
3 the content of different attachment files associated with the application program to  
4 images in the file format.

1 19. A signal-bearing medium containing a fax management program and  
2 rendering program for processing a message in a network computing system including  
3 a facsimile transmission comprised of a recipient contact address and message  
4 content, wherein the message content includes at least one of message text and  
5 attached files, wherein the fax management program is executed by multiple fax  
6 management computers and the rendering program is executed by a rendering  
7 computer to perform:

8 wherein the fax management program is capable of causing the fax  
9 management computers to perform:

10 (i) managing multiple facsimile transmission as fax jobs in multiple  
11 fax management systems;  
12 (ii) transferring the message content to the rendering computer; and  
13 (iii) transferring the message content in the file format to one of  
14 multiple communication ports for transmittal to the recipient contact address;  
15 and  
16 wherein the rendering program is capable of causing the rendering computer  
17 to perform:  
18 launching at least one application program to convert the message content  
19 from the multiple fax jobs to images in a file format; and  
20 transferring the converted message content in the file format to the fax  
21 management system that sent the message content to the rendering computer.

1 20. The signal bearing medium of claim 19,  
2 wherein the fax management program performs transferring job numbers  
3 assigned to the fax jobs to the rendering computer; and  
4 wherein the rendering program further performs requesting the message  
5 content for the job numbers, wherein the fax management servers transfer the  
6 message content in response to receiving the request from the rendering computer.

1 21. The signal bearing medium of claim 20, wherein the fax management  
2 software further performs:  
3 maintaining job tables including fax job records identified by job number; and  
4 changing state fields in the fax job records to manage the workflow of the fax  
5 jobs between the fax management system, rendering computer, and communication  
6 port.

1 22. The signal bearing medium of claim 20, wherein the message  
2 including the facsimile transmission further includes sender information for the

3 sender of the fax job, wherein the rendering program generates the content of each  
4 attachment and message text into images in the file format, and wherein the rendering  
5 program further performs:

6 using the sender information to access fax cover page information for the fax  
7 jobs;

8 generating a cover page image in the file format from the fax cover page  
9 information if there is fax cover page information for the sender of the fax job; and

10 transmitting the converted fax cover page image to the fax management  
11 computer that sent the job number.

1 23. The signal bearing medium of claim 19, wherein the file format  
2 comprises an image file format, and wherein the message content is converted to one  
3 or more images in the file format.

1 24. The signal bearing medium of claim 19, wherein for each attachment  
2 file received from the fax management computers, the rendering program further  
3 performs:

4 determining one of multiple application programs capable of opening the  
5 attachment file; and

6 using the determined application program to convert the content of the  
7 attachment file to one or more images in the file format, wherein all the images in the  
8 file format comprising the at least one converted attachment file are transferred to the  
9 first computing system.

1 25. The signal bearing medium of claim 24, wherein the rendering  
2 program further performs converting the message text to at least one image in the file  
3 format, wherein the images comprising the converted attachment files are arranged in



4 a file in the file format according to an order in which they were attached to the  
5 message and follow one image comprising the converted message text.

26. The signal bearing medium of claim 24, wherein the rendering program further performs maintaining multiple application programs open to concurrently convert the content of different attachment files for fax jobs from multiple fax management computers to images in the file format.

1           27.     The signal bearing medium of claim 24, wherein the rendering  
2     program further performs using one application program to concurrently convert the  
3     content of different attachment files associated with the application program to  
4     images in the file format.